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DISPATCH JANUARY 2014

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Schedule of Flying Events

Date	Day	Location	Time	Notes
Dec. 29*	Sun.	Osawatomie	8:30 AM - 4 PM	Indoor
Jan. 5*	Sun.	Osawatomie	8:30 AM - 4 PM	Indoor
Jan. 19*	Sun.	Ozanam	9 AM - 12 PM	Indoor
Feb. 2*	Sun.	Osawatomie	8:30 AM - 4 PM	Indoor
Feb. 16*	Sun.	Ozanam	9 AM - 12 PM	Indoor
Mar. 2*	Sun.	Osawatomie	8:30 AM - 4 PM	Indoor
Mar. 16*	Sun.	Ozanam	9 AM - 12 PM	Indoor
Apr. 20*	Sun.	Ozanam	9 AM - 12 PM	Indoor
May 3*	**Sat.**	**Osawatomie**	**8:30 AM - 4 PM**	**HAFFA Annual Indoor Contest**

***** indicates official HAFFA event/activity

HAFFA Indoor Site Locations:

Ozanam Gymnasium
421 E. 137th St.
Kansas City, MO

Kansas City College & Bible School
7401 Metcalf
Overland Park, KS

Osawatomie City Auditorium
425 Main St.
Osawatomie, KS

For Outdoor flying information contact Mike Basta (913-492-4830)
For Indoor flying information contact Emil Schutzel (913-341-7788)

1. Osawatomie reserves the right to cancel our reservation if they get a paying customer.
2. Outdoor flying is subject to weather conditions.

This is a reminder that our indoor flying fee is $10/person.

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Facts you may not know

In ancient times strangers shook hands to show that they were unarmed.

Strawberries are the only fruits whose seeds grow on the outside.

Avocados have the highest calories of any fruit at 167 calories per hundred grams.

The moon moves about two inches away from the Earth each year.

The Earth gets 100 tons heavier every day due to falling space dust.

Due to earth's gravity it is impossible for mountains to be higher than 15,000 meters.

West Baden - 2014 by Bill Gowen NOTE: This is revised information

Walt has confirmed that an event will be held at West Baden on April 5 and 6, 2014. It should be safe now to make plans to attend. There are also some exciting developments in the works that are not quite confirmed at this point. Stay tuned!

One more perk is that rooms will again be available to fliers for $149 + 11% tax per night. The code for getting the reduced rate is 04-14IND. (IND as in INDoor)

Monthly meeting - 10/15/2013 by Jeff Renz

Attending the meeting were: Dana Field, Lynn Chaffee, Mike Basta, Tem Johnson, Ralph Preston, Jeff Renz, Wallie Freeburg, Emil Schutzel, Abe Gallas, Ralph Carlson – This meeting was held at the JC Corinth Branch Library in Prairie Village.

Meeting was called to order at 7:16 pm.

Treasurer's Report – Lynn reported we had a balance of $743.92. The report was accepted as presented.

Secretary's Report – Minutes from the September meeting were read and accepted as read.

Old Business

1) Flying Sites – Nothing has been done about contacting AMA for help in nailing down a site. However, two more potential sites were discussed. One is just north of the Missouri River near the Argosy Casino. Mike Basta is to contact the City of Riverside about using the site. Also, Scott Baird is checking on near Liberty, Missouri.

2) Marion Contest – The weather was bad both days, with the wind blowing 10 – 25 mph. A number of normal regulars from out of state, including the entire Colorado contingent and Bob Hanford from Oklahoma did not come. Duke Horn came from Texas. However, we are locked on the first weekend of October. We had 12 paid entrants, down from the 18 last year. Pictures (Jeff Renz) will be sent to Dianne Basta for our website.

New Business

1) The Perry, Oklahoma out door contest id Oct. 26 & 27, and Lynn Chaffee wants to go.

2) November 2 & 3 is the Beatrice Fall indoor contest. Jeff Renz and Emil planning on going.

3) Jack Koehlar wants to give his model stuff to the club. It is a large collection of items, with maybe more than 100 kits, and there was a discussion of what to do with it. A motion was made, and passed unanimously to split any sales proceeds 50:50 between the club and Jack K, as he can use the money.

4) Indoor flying – We need to get the Ozanam dates nailed down. Ted has not been available to get confirmation of the dates.

The business meeting was adjourned at 8:37 pm. The next meeting is Tuesday, November 19, preferable at the Corinth Branch Library if available, and Cedar Roe if not.

Show & Tell/Program – Jeff Renz gave a very brief program.

Wind hard or not so hard - From an internet discussion:

Piecost wrote:

I have read this thread with interest. I do not fly LPP but am trying to understand rubber motors better. Therefore I would like to ask why people wind up to near breaking before backing off?

From a small amount of testing I performed on Super-Sport rubber I found that no matter what number of turns I wound to; the unwinding torque versus turns curve was the same. If this is true then there is no benefit in winding so high. The hysteresis took about 50 turns, so I only had to wind 50 turns more than required before backing off to the desired torque.

His graph is attached.

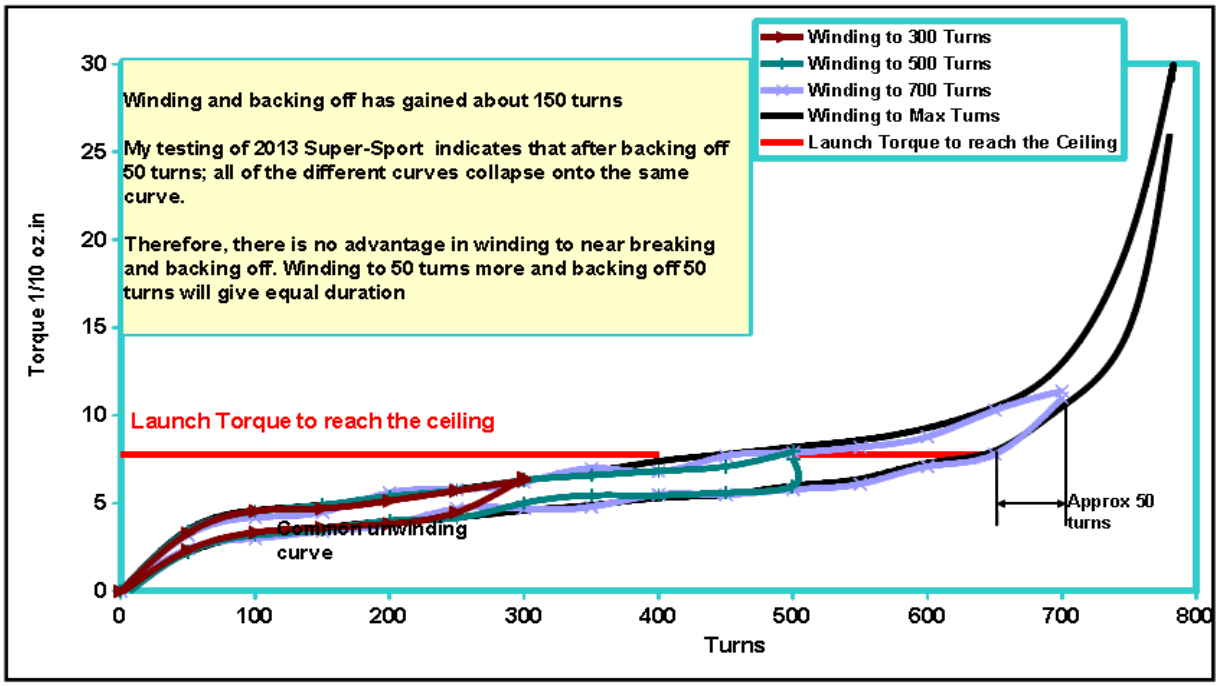
Kang Lee replied:

I think you have cracked the code. I have also concluded the same, but with a caveat. In my tests, the unwinding curves are equal only after the motor is broken in. In your example, I found if I wind the motor to only 600 turns before the motor is broken in, its unwinding curve falls below that of the 800 turns wind. But once the motor is broken in, the unwinding curve soon become the same after some unwinding.

I believe for many people, winding to 800 then backing off helps because the motor has not been broken in, and the act of winding hard breaks the motor in. On subsequent winds, it's not necessary to wind to max turns/torque.

However, a caveat. my conclusion and yours are arrived at by "looking" at curves and likely from limited experiments. I'm not sure I can say for sure that the unwinding curves are identical, say, to 5% of each other. That is, limited testing probably cannot reveal any advantages under 5%. And in practice, a 5% advantage is huge. I am not ready yet to completely dismiss the observations made by many people over the years. If you have the time, I would encourage more extensive testing.

Blasphemy? Thoughts? - Kang Lee



I typically only wind to max or near max only when necessary. If max turns on a motor was 2000 and I wanted to take a test flight with say 250 turns. I would not wind 2000 then back off 750 to have 1250 launch turns, I just wind to 1250. As launch turns increase I then start backing off to lower launch torque to control my climb based on previous test flight results. Once I have my model trimmed and I have my flight time goal set flight I then calc number of launch turns needed to get what I want flight time wise then see if the motor will do it. .If my motor needs too many backoff turns to keep from overclimbing the site then I might change the motor or prop as I do not like backing off more than ~100 turns on a model but sometimes at a contest you don't have that luxury to do additional experimentation. Lots of backoff to me says the combination is not correct but that is my flying style/preference. I had lots of trouble out climbing the ceiling at USIC this year as my flaring props were not flaring enough. I know on my one HLS flight I backed off about 250 turns to try and stop the climb and yet retain enough launch turns to do close to 40 minutes but at 14 minutes I was still climbing and then hung. In all fairness it was my Johnson City prop so consequently more backoff was need for the lower site. So for next year I need to noodle out some new props so I can retain the turns I was backing off. I do what makes sense to me but in the end all that matters is the result on the stopwatch. - Don Slusarczyk

This has to be the simplest idea to test imaginable. So intend to test it. When I have the time. And energy. - Bill Gowen

Wait a minute. I think this idea is counter to everything we know about winding rubber motors. The reason that I wind to higher torque and back down is because when you reach the desired torque coming down from a higher torque the motor will have more turns than if you only wound up to the desired launch torque.

So basically I don't think what Piecost said is true but the only possible proof one way or the other is to do the test. - Bill Gowen

Also I remember Don S. saying several years ago that he thought winding motors to the maximum destroyed the rubber. I actually used that line of thinking for a few years and did okay with it. Lately I've been trying to squeeze max turns out of my motors even for situations that require a lot of backoff. It would be nice to know for sure whether this is a good practice. - Bill Gowen

What Piecost and I are suggesting is to wind above launch torque then unwind, but not wind all the way to near breaking torque.

For example, for a F1L flight at Urbana where the desired launch torque is 0.15 in-oz, wind to .35 in-oz, then back wind to 0.15 in-oz to launch. Do this instead of winding to the max torque of 0.45 or 0.5 in-oz, then back winding down to 0.15 in-oz.

We both found that the turns versus torque are identical (wind hard versus not so hard) as the motor unwinds down from 0.15 in-oz. - Kang Lee

This sounds like a conversation I had with someone on the way to Kent a few years ago.- Bill Gowen

The missing piece that year at Kent (2011) was getting the motor broken in. I didn't wind hard enough, and my motors weren't broken in. So it was a bust until I wound my F1L motors hard, to about 0.55 in-oz, until I had success.

It was late 2012 that I did these experiments and found the possibly missing piece of the puzzle.
- Kang Lee

So you guys wind only to a torque and do not care about actual turn count? I find that amazing. I am just the opposite, I go by turn count then back off to a torque level to regulate the height. So If I want say 1750 launch turns on a motor that can take 2000 I may wind to1850 then back off some turns to get my desired launch torque. If the motor could take 2000 turns, I would not wind to 2000 then back off 250 to 1750. I typically only wind (by turns) past my target minimum required launch turns then back off some to knock off some of the torque. Also any new motor I never fly use until broken in. I take a freshly made motor lube it up generously then say if it would take 2000 turns I wind it to ~1750 or so then unwind and measure the length to see if it stretched, a 14": loop would be like ~14.7" after a break in then I relube and then use that for my flights. Once I do that process and the motor takes a stretch set, the motor is rather consistent over the windings for the day if you done push it too hard. The only time it starts to deviate is if I really push the motor hard multiple times in a row. If I find my model is needing near max turns on each flight and I wind to near max turns on each flight and then say it hangs up, and then I wind max again and hang again, then do it again I find the motor will sag and drop off on these subsequent windings. So I then set that motor aside for a while or make up a new one. Sometimes the "sagging" model will do equal time from less height sometimes it does less time as the model will not climb as high. I noticed this on Nocal a lot as the rules require 3 of 3 flights so often in a contest you take all three in a row and if you are leaning on the motor the first flight, the second flight will be within a few seconds but the third flight will always not climb as high and will either so the same time or sometimes less so on the third flight I usually do not back off as much as I know this will happen. I can usually also tell it is sagging when I start to back off. A sagging motor will drop torque quickly with a few unwinds which is something it did not before. I may have needed 100 unwinds to get my torque but after 3 or 4 full winds of the rubber only 50 backoff gets the same torque then I know the motor is toasted for the day.

Don Slusarczyk

If I am trying to wind a motor to as close to "max." as I can, without breaking it, I always wind to torque not turns.
One other comment. If I wind a motor to "max." I have about a 50% chance of being able to wind it to "max." a second time without it breaking.
Gary H

I tend to thinking of motors as being more analogous to half-lives than to a light switch. I do not believe that a motor hits a point where it simply transitions from being new to being broken in. I think that after the first hardish wind, the motor may be halfway or two thirds of the way broken in. Then successive winds serve to break it in further. I am basing my theory on observing the change in the loop length after successive windings. The loop elongates most after the first winding but continues to lengthen to a lesser degree with each subsequent winding.

I think this is why we historically have seen duration increase as the number uses of a motor increases if nothing else changes. - Nick Ray

Facts you may not know

For every extra kilogram carried on a space flight, 530 kg of excess fuel are needed at lift-off.

The letter J does not appear anywhere on the periodic table of the elements.

A Blue Whale can eat as much as 3 tones of food everyday, but at the same time can live without food for 6 months.

Humans have 46 chromosomes, peas have 14 and crayfish have 200.

Ships That Sail Through the Clouds: Meet Luigi Prina, the 83-Year-Old Builder of Flying Model Ships













When he was just 16 years old Luigi Prina entered & won a national aircraft modeling competition. When he went to collect the prize money the organizers asked the boy why his father couldn't come to collect it himself. Nearly fifty years later, the now successful architect met a painter and a boat builder named Eugenio Tomiolo and while they were talking made a bet that perhaps Prina could take one of Tomiolo small model ships and make it fly like an airplane. Tomolio accepted and it wasn't long before a small flying boat was whirring in circles around his small studio that coincidentally had clouds painted on the ceiling. A new passion was born and Prina has since dedicated nearly 20 years of his life to building flying boats, bicycles and other unconventional aircraft.